Department of Primary Industries sweetpotato projects update November 2025

Minister visits Gatton Research Facility (GRF)

The sweetpotato industry has received a welcome boost with the announcement of $4.5 million in funding for a new purpose-built glasshouse at the GRF. Queensland's Minister for Primary Industries, Tony Perrett, along with State Member for Lockyer, Jim McDonald, visited GRF in December 2025 to announce the news.

The new, climate-controlled glasshouse will replace the current 60-year-old structure, providing modern facilities to support continued research and innovation for the sweetpotato industry.

During the visit, the Minister praised the industry's success and reaffirmed the Department of Primary Industries' commitment to supporting growers through ongoing research and development.

Image 1 Sandra Dennien and Mary Firrell explaining current research to Minister Perrett and member for Lockyer.

Pest management for the Australian Sweetpotato industry (Project: PW22000).

Funding: Hort Innovation from sweetpotato levies matched by federal government funding. October 2023 to September 2026. *This project builds on the previous nematode project (PW17001) and aims to identify management approaches for key pests in sweetpotato production - nematodes and viruses. Maintaining capacity in the Department of Primary Industries (DPI) Australian sweetpotato pathogen testing and investigation program limits industry vulnerability in the event of an incursion.*

Cover crop screening

The use of resistant cover crops is a key management tool to reduce RKN populations in between sweetpotato crops. Another cover crop screening experiment has been completed. This was a repeat testing for Raptor oats with results confirming that this cultivar has good resistance against the common RKN species *M. incognita* and *M. javanica* as well as the Guava RKN species *M. enterolobii* which is as yet undetected in sweetpotato fields. Sunn hemp was slightly susceptible to all 3 species in this screening. It has given variable results across multiple tests, varying between resistant reactions and slightly susceptible, but remains an acceptable legume rotation if used with caution. Note that Signal grass and Red Natal grass are classified as weeds.

			M. enterolobii	***M. incognita***	***M. javanica***
Crop	**Common Name**	**Cultivar**	**Average RF**	**Average RF**	**Average RF**
Clitoria ternatea	Butterfly Pea		2.03 (SS)	0.00 (HR)	0.50 (R)
Avena sativa	Oats	Raptor	0.01 (HR)	0.07 (HR)	0.01 (HR)
Melinis repens	Red Natal Grass		0.01 (HR)	0.12 (R)	0.03 (HR)
Chloris gayana	Rhodes Grass	Callide	0.01 (HR)	1.40 (SS)	4.62 (SS)
Urochloa decumbens	Signal Grass		0.01 (HR)	0.01 (HR)	0.00 (HR)
Crotolaria juncea	Sunn Hemp		2.59 (SS)	1.54 (SS)	1.72 (SS)
Solanum lycopersicum	tomato	Tiny Tim	56.65 (MS)	151.40 (HS)	58.08 (MS)

HR = Highly resistant, R = resistant, MS = moderately susceptible, SS = Slightly susceptible.

If you are using cover crops that you would like tested for nematode resistance, feel free to contact Sandra on 0427 604 144. All we need is a cup of seed.

Causes and management strategies for skin loss in Sweetpotato (Project: PW21002).

Funding: Hort Innovation from sweetpotato levies matched by federal government funding. September 2022 to May 2026. *Skin damage is the major contributor to loss of quality resulting in the downgrading of 10-30% of harvested product and economic loss. This project aims to address knowledge gaps and identify mechanisms responsible for skin retention through production practices and pre farm gate handling and generate knowledge on practical interventions to reduce skin loss with a best practice manual.*

On-farm testing of the SmartSpud® devices continues. These studies are instrumental in identifying optimal handling practices that minimise skin damage during harvest and packing processes. Most growers will have had this demonstration on their farm. If you missed out, you would like a re run, or have changed your system or pack line, feel free to contact Rach Langenbaker on 0436 928 512 and David Shorten, who will be only too happy to bring the smart spud out to your farm.

Improving root crop resilience and biosecurity in Pacific Island Countries and Australia (Project HORT2018/195).

Funding: The Australian Centre for International Agricultural Research (ACIAR) from federal government funds.
August 2022 to December 2025 with a possible extension to December 2027. *The project aims to build on existing international collaborative relationships with researchers from the Centre for Pacific crops and Trees in Fiji to enhance and refine Australian sweetpotato virus diagnostics and support increased biosecurity preparedness, threat surveillance and response.*

Rach Langenbaker and Michael Hughes, visited Samoa, Fiji and the Solomon Islands in November. During the trip Rach and Mike reviewed Pathogen Tested (PT) sweetpotato activities, assisted in a field trial assessment, and delivered hands-on training with growers and extension staff.

Across all countries, PT planting material was being well maintained and there was strong interest in improving vine quality, seedbed systems and agronomic practices. New PT versus non-PT comparison trials are planned in Fiji and Solomon Islands for 2026, focusing on yield and quality benefits under practical farming conditions.

Rach and Mike also visited the laboratory at the Centre for Pacific Crops and Trees (SPC CePaCT) in Fiji. This lab is working with DPI sweetpotato researchers to standardise PT testing, ensure accurate sweetpotato virus detection and monitor for biosecurity threats and strengthen regional biosecurity across the pacific and Australia. ACIAR funding also partially supports the PT lab in Gatton.

GRKN - Reminder

Although *Meloidogyne enterolobii* or Guava Root-knot nematode (GRKN) has not been detected in commercial sweetpotato production areas to date, on-farm biosecurity measures are your front line of defence to keep GRKN (and many other pests) out of your property. Like other root-knot nematodes, *M. enterolobii* can be easily spread through infested soil and infected plant material. It is critical that growers are mindful of risk pathways and strive to avoid introduction to their property. Signage, restricted access (particularly to cropping areas), machinery wash-down and use of clean planting material are all measures which can help to reduce the risk. Simple, low-cost measures can make a big difference in keeping your farm safe.

Good information about farm biosecurity is available through the Farm Biosecurity Website, including the Farm Biosecurity Action Planner. The Australian banana industry has also produced a lot of resources (e.g. Better Bananas On-farm Biosecurity) to help growers protect themselves from Panama disease, and many of the same biosecurity principles can be used to prevent *M. enterolobii* spread and protect sweetpotato farms.

If you see any unusual or particularly severe nematode damage to crops, contact Biosecurity Queensland on 13 25 23 or via the Report a Pest or Disease website portal.